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EXAMINER

WILLIAMS, JEFFERY L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claims 1 – 24 are pending.

This action is in response to the communication filed on 12/15/09.

All objections and rejections not set forth below have been withdrawn.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations of "means for authenticating each other by a first authentication", and "means for authenticating each other by a second authentication". 35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof." "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." In re Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc). In the instant case, the examiner notes

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that the applicant's disclosure fails to clearly and sufficiently indicate to one of ordinary skill in the art the precise structure of the means, other than that of the “a first data processor means”, “a second data processor means”, for performing the recited functions (see M.P.E.P. 2181). Furthermore, the examiner notes that the applicant does not offer to specifically point out the corresponding structure for each of the newly recited means.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the new (or amended) claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 – 24, the examiner notes that the applicant has amended such claims to comprise new recitations, at least, of “a first data processor means”, “a second data processor means”, “means for authenticating each other by a first authentication”, and “means for authenticating each other by a second authentication”.

The examiner points out that the 35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language “shall be construed to cover the corresponding structure...described in the specification and equivalents thereof.” “If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.” *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc). In the instant case, the examiner notes that the applicant's disclosure appears to show correspondence between the disclosed “a first processor” (e.g. fig. 1:2) and “a second processor” (e.g. fig. 1:9) and the recited “a first data processor means”, “a second data processor means”. Thus, the recited means appears to reasonably correspond to two processor means.

However, respecting the recited “means for authenticating each other by a first authentication” and “means for authenticating each other by a second authentication”, the examiner notes that such recitations render the scope of the claims indefinite. There appears to be no further structure disclosed by the applicant and reasonably corresponding to the recited functions other than that of the first and second processor means. Thus, the applicant’s disclosure fails to clearly and sufficiently indicate to one of ordinary skill in the art the precise structure of the means for performing the recited function (see M.P.E.P. 2181). Furthermore, the fact that the applicant appears to refer to the same means by a plurality of different recitations (e.g. “a first processor means means”, “a means for authenticating each other by a first authentication”, and “a means for authenticating each other by a second authentication”) renders the meaning of the recitations ambiguous.

Regarding claims 5, 10, 15, and 20, the examiner respectfully notes that they comprise issues rendering the meaning of the claims unclear.

For example, lines 8 and 14 of claim 5 recites “the second accumulation data” within the recitation “*or the second data processor means generates and stores into the third storage the second accumulation data*”. However, it is noted that applicant's reference to “the second accumulation data” appears improper as the accumulation data being referenced appears to be data generated by the second data processor means and not the accumulation data generated by the first data processor means. For

the purpose of examination, the examiner presumes the applicant to recite "second accumulation data".

Claims 10, 15, and 20 comprise the same or similar issues and the applicant is respectfully encouraged to correct such deficiencies so as to render the scope of the claims clear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al. (Tsuji), "Remote Control System", U.S. Patent Publication 2004/0056776 in view of Hisada et al. (Hisada), U.S. Patent 6,043,752.

Regarding claim 1, as best can be understood in view of the recitations, it is noted that Tsuji discloses:

an immobilizer unit including: a first data processor means; a first communication part connected with the first data processor means; a first antenna connected with the

first communication part; a first storage connected with the first data processor means (Tsuji, fig. 1:2, see also fig. 1:1),

the first storage preliminarily storing first data for mutual authentication (Tsuji, fig. 11, par. 88); *and a second storage connected with the first data processor means* (Tsuji, fig. 11 – herein Tsuji discloses a plurality of locations for storage (“storage”));

and a portable unit including: a second data processor means; a second communication part connected with the second data processor means; a second antenna connected with the second communication part; and a third storage connected with the second data processor means (fig. 1:1, see also fig. 1:2),

the third storage preliminarily storing the first data for mutual authentication (Tsuji, fig. 11);

and a fourth storage connected with the second data processor means, the fourth storage preliminarily storing second data for mutual authentication different from the first data for mutual authentication (Tsuji, fig. 11);

As noted above, Tsuji discloses the claimed apparatus or system. The examiner notes that system or apparatus claims must be *structurally* distinguishable from the prior art. Furthermore, the examiner reminds the applicant that “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

The examiner notes that the prior art will be relied upon as disclosing the structure required by the claims. However, regarding the various recitations of the claims featuring aspects pertaining the operation of the claimed system or apparatus,

the examiner notes that the prior art will continue to be referenced largely for the applicant's benefit and understanding of the prior art reference.

wherein:

the immobilizer unit further includes an information reception part connected with the first data processor means (Tsuji, fig. 1:11, 21), and when a first instruction is fed into the information reception part (Tsuji, fig. 1:11, 21 – computing devices operate according to instructions)

Tsuji discloses a vehicle security system wherein two communicating units comprise means for conducting bi-directional communication (Tsuji, par. 84, 92). Tsuji discloses *the first data processor means and the second data processor means authenticate each other by: (1) the first data processor means transmitting via the first antenna an ... data based on the first data for mutual authentication stored in the first storage and (2) the second data processor means receiving via the second antenna ... the ... data* (Tsuji, par. 84,88,90). However, Tsuji does appear to disclose that data transmitted from the first data processor means is encrypted. Thus, Tsuji does not appear to disclose a means for encryption.

Hisada also discloses a vehicle security system wherein two communicating units comprise means for conducting bi-directional communication (e.g. Hisada, fig. 10, 11). Hisada discloses that the communications between the units should be encrypted Hisada, 4:17-28; 16:48-55). Thus, Hisada discloses a means for encryption. It would have been obvious to one of ordinary skill in the art to employ encryption and decryption of transmitted and received data within the security system of Tsuji because one of

ordinary skill in the art would have been motivated by the teachings for improving security (Hisada, 16:48-55).

Responsive to the authentication between the first data processor means and the second data processor means, the second data processor means transmits the second data for mutual authentication via the second antenna; the first data processor means further stores, into the second storage, the second data for mutual authentication received via the first antenna and transmits the second data stored in the second storage via the first antenna; and the second data processor means further stores, into the third storage, the second data for mutual authentication received via the second antenna (Tsuji, par. 43, 44, 49, 53).

Regarding claim 4, as best understood by the examiner, it is rejected, at least, for the same reasons as claim 1, and furthermore because, the combination enables:

Responsive to the authentication between the first data processor means and the second data processor means, the first data processor means generates, stores into the second storage, and transmits via the first antenna, second data for mutual authentication different from the first data for mutual authentication (Tsuji, par. 84, lines 1-6, fig. 10:33), and the second data processor means stores, into the third storage, the second data for mutual authentication received via the second antenna (Tsuji, par. 84, lines 6-10).

Regarding claim 5, as best understood by the examiner, it is noted that the limitations are not required by the claims (e.g. see recitations “*when both...*”). However, the examiner points out that the combination enables:

wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, either the first data processor means generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor means generates and stores into the third storage the first accumulation data; and when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor means generates and stores into the second storage, second accumulation data different from the first data for mutual authentication, or the second data processor means generates and stores into the third storage the second accumulation data (Tsuji, par. 89).

Regarding claim 6, as best understood by the examiner, it is noted that the limitations are not required by the claims (e.g. see recitations “*when both...*”). However, the examiner points out that the combination enables:

wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor means transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second

data processor means stores, into the third storage, the first data for mutual authentication received via the second antenna; and when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor means generates and stores into the second storage, second accumulation data different from the first data for mutual authentication, or the second data processor means generates and stores into the third storage the second accumulation data (Tsuji, par. 89).

Regarding claim 7, as best understood by the examiner, it is noted that the combination enables:

wherein the portable unit further has a fifth storage preliminarily storing an ID code, and the first data processor means and the second data processor means authenticate each other also using the ID code (par. 84 – herein, Tsuji discloses receiving a signal comprising an ID code. The ID code is subsequently held for processing and performing operations using the code, thus requiring a means of storage).

Regarding claim 8, as best understood by the examiner, it is noted that the combination enables:

wherein the immobilizer unit further has a sixth storage, the second data processor means transmits, via the second antenna, the ID code stored in the fifth

storage, and the first data processor means stores, into the sixth storage, the ID code received via the first antenna (Tsuji, par. 84, fig. 10:33).

Regarding claim 9, as best understood by the examiner, it is noted that the combination enables:

wherein upon input of a second instruction into the information reception part, the first data processor means generates third accumulation data different from the ID code stored in the sixth storage, and stores the third accumulation data into the sixth storage (Tsuji, fig. 11; par. 43).

Regarding claims 2, 3, and 10 – 24, they comprise essentially similar recitations as claim 1 - 9, and they are rejected, at least, for the same reasons.

Response to Arguments

Applicant's arguments filed 12/1/09 have been fully considered but they are not persuasive.

Applicant argues or asserts essentially that:

Applicant respectfully disagrees. Applicant notes that lines 9-10 of claim 5, in Applicant's amendment of July 27, 2009, initially recites that the first data processor generates and stores second accumulation data. Thus, line 12 of claim 5 refers to the

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"second accumulation data" first recited at line 10 of claim 5. Accordingly, "the second accumulation data" recited in line 12 of claim 5 includes proper antecedent basis.

(Remarks, pg. 14)

Examiner respectfully responds:

The examiner respectfully maintains the rejection and notes that it is improper to refer to the data generated by the second processor (e.g. line 12, claim 5) as the data that was generated by the first processor (e.g. line 10, claim 5). The examiner notes that the two sets of data are not the same and therefore cannot be referenced as the same. Instead, applicant is referencing sets of data which are distinctly generated by different sources in the alternative only. Thus, for the purpose of examination, the examiner presumes the applicant to recite "second accumulation data" [line 12, claim 5], as the accumulation data generated herein references data generated by the second data processor means and not accumulation data that could have been alternatively generated by the first data processor means.

Applicant argues or asserts essentially that:

It is noted that the applicant essentially argues the applicant's previously stated position of record that the prior art does not teach mutual authentication. (Remarks, pg. 16 – 18)

Examiner respectfully responds:

In response, the examiner respectfully maintains the rejected for the reasons of record. The examiner notes that the applicant's claims of an apparatus comprising the structures of first and second processors fail to distinguish over the prior art structures comprising first and second processors. The examiner reminds the applicant that the manner of operating a prior art structure does not distinguish over the prior art structure (M.P.E.P 2114)

In light of the applicant's arguments pertaining to the manner in which the claimed apparatus operates, the examiner respectfully suggests, as was also noted during the interview of 10/19/09, that the applicant amend the claims so as to recite method claims explicitly comprising the method steps in question. In response to applicant's argument that the prior art structure fails to disclose the operation intended, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery Williams whose telephone number is (571) 272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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/Jeffery Williams/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437